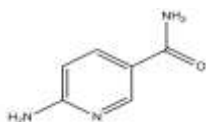


**PRODUCT: 6-Aminonicotinamide****ALTERNATE NAME:** 6-amino-3-pyridinecarboxamide; 6-AN; NSC21206; SR4388**CATALOG #:** B1047-100, 500**AMOUNT:** 100 mg, 500 mg**STRUCTURE:****MOLECULAR FORMULA:** C<sub>6</sub>H<sub>7</sub>N<sub>3</sub>O**MOLECULAR WEIGHT:** 137.1**CAS NUMBER:** 329-89-5**APPEARANCE:** White to off-white solid**SOLUBILITY:** DMSO (~ 1 mg/ml)**PURITY:** ≥98% by HPLC**STORAGE:** Store at -20°C. Protect from air and light

**DESCRIPTION:** 6-aminonicotinamide (6-AN) is inhibitor of glucose-6-phosphate dehydrogenase (G6PD), which catalyzes the conversion of G-6-P to 6-phosphogluconolactone, the first step of the pentose phosphate pathway. 6-AN has been widely used as a chemical tool in various experimental systems to study the biological consequences of inhibiting pentose phosphate pathway. Due to the essential roles of this pathway in generating reducing power (NADPH) and important metabolic intermediates (pentose-5-phosphate) for synthesis of macromolecules, it is not surprising that 6-AN exhibits anticancer activity in vitro, causes oxidative stress, and sensitizes cells to anticancer agents and radiation.

**REFERENCES:** Varshney, R., *et al.* (2005). *Int. J. Radiat. Biol.* **81**, 397-408.

**HANDLING:** Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

**RELATED PRODUCTS:**3-Bromopyruvic acid (**B1045**)Oxythiamine Chloride Hydrochloride (**B1046**)6-Aminonicotinamide (**B1047**)2-Deoxy-D-glucose (**B1048**)Lonidamine (**Cat. No. B1058**)

**USAGE:** **FOR RESEARCH CH USE ONLY! Not to be used in humans**